



## State of Vermont

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Department of Environmental Conservation  
Waste Management Division  
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July 30, 1998

Mr. Ned Huntley  
Waste Systems International, Inc.  
RR #3, Box 1788  
Waterbury, VT 05676

RE: Contamination at High Street Transfer Station  
St. Johnsbury, Vermont  
SMS Site # 98-2421

Dear Mr. Huntley:

The Sites Management Section (SMS) has received the Phase II - Subsurface Investigation (Phase II) report outlining the subsurface conditions for the above referenced site and conducted by Tighe & Bond in March and April, 1998. This report, dated June 17, 1998, summarizes the degree and extent of contamination encountered during the assessment.

The Phase II was conducted to evaluate potential impacts from the Fairbanks Morse Foundry located less than 1/2 mile from the site and the former St. Johnsbury Landfill which partially underlies the site.

The Phase II consisted of a general site description; a review of site history, geology, and hydrogeology; installation of 5 soil borings, 5 monitoring wells, and 14 test pits; soil and groundwater sampling and laboratory analyses, evaluation of contamination nature and extent; evaluation of landfill waste area and volume; and evaluation of exposure potential.

Soil samples from each boring were analyzed for Volatile Organic Compounds (VOCs) (EPA 8260), Semi-VOCs (EPA 8270) Priority Pollutant Metals plus barium, Cyanide, Herbicides (EPA 8150) at 2 select borings, and Total Petroleum Hydrocarbons (TPH) (EPA 8015 -g and d). Ground water samples were analyzed for the same suite of compounds as well as the indicator parameters: alkalinity, hardness, total organic halogen, BOD and COD. Soil sample results were compared to EPA Soil Screening Levels (EPA-SSL) established by the EPA Office of Solid Waste and Emergency Response (EPA 1996). Groundwater sample results were compared to Vermont Groundwater Enforcement Standards (VGES) and Preventative Action Limits (PAL). Where Vermont standards were not established, the SMS compared laboratory results to risk-based concentrations (EPA-RBC's) established by EPA Region 3 (April, 1998) for an industrial setting.

Results indicate some VOCs, SVOCs, TPH, metals, and herbicides compounds were detected in some of the soil samples from the site. Only arsenic exceeded EPA-SSLs (for ingestion-0.4 ppm) with concentrations ranging from 1.2 ppm to 2.1 ppm. However, these soil arsenic levels do not exceed the EPA-RBC of 3.8 ppm. Soil PID levels up to 37 ppmv were detected in the solid waste and burn dump materials. Overburden/cover soils never exceeded 5 ppmv.

Results indicate some VOCs, SVOCs, TPH, metals, and herbicides were detected in some of the groundwater

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samples from the site. Only chloroform exceeded VGES (6.0 ppb) in monitoring well MW-2D (8.6 ppb) and MW-5 (6.5 ppb). All other target analytes were below the appropriate regulatory standards.

A sensitive receptor survey indicates the only potential receptors is the Sleeper River adjacent to the site and on-site workers.

The report concludes that the site, under its current use, does not constitute a significant risk to on-site workers because the soils with regulatory exceedences are located at depth and human exposure is unlikely. Furthermore, given no water supply wells in the vicinity of the site, a significant risk to human health does not exist with respect to regulatory exceedences in groundwater. The report further concludes that based on: 1) the lack of detectable regulated compounds in a groundwater seep and monitoring wells adjacent to the river and 2) the dilution factor of river water to groundwater discharge from the site that a significant impact to the river is unlikely.

The report recommends one round of sampling of on-site wells for VOC's and indicator parameters as well as lead in monitoring well MW-2S. The report further recommends regrading of some site slopes and the placement of additional cover to minimize exposure from waste.

Based on this information, SMS concurs with these conclusions. However, given the limited dataset and the historical use of the site, SMS requests collection of additional data to demonstrate the observed conditions are seasonally consistent. As such, SMS requests one year of quarterly sampling and analysis for the following:

- ▶ VOC - Groundwater, All monitoring wells
- ▶ TPH (gas and heavier hydrocarbon range) - Groundwater, All monitoring wells
- ▶ Indicator Parameters - Groundwater, All monitoring wells
- ▶ VOC - Sleeper River - Upstream, adjacent, and downstream to the site.
- ▶ VOC - Seep

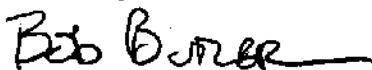
Also, sample once:

- ▶ VOC, SVOC, metals, and TPH - Discharge pipe referenced in the report.

Please have your consultant submit a workplan to address this request within 20 days of receipt of this letter for comment and approval prior to conducting field activities. SMS requests that the initial round of sampling occur on or before mid-September 1998 under low-flow surface water flow conditions.

If you have any questions, please feel free to call me at (802) 241-3876.

Sincerely,



Robert G. Butler, Jr.  
Sites Management Section

cc: DEC Regional Office (transmitted electronically)